03060103-150

(Long Cane Creek)

General Description

Watershed 03060103-150 is located in Abbeville, Greenwood, and McCormick Counties and consists primarily of ***Long Cane Creek*** and its tributaries. The watershed occupies 145,895 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Hiwassee series. The erodibility of the soil (K) averages 0.26, and the slope of the terrain averages 9%, with a range of 2-15%. Land use/land cover in the watershed includes: 75.7% forested land, 14.6% agricultural land, 2.9% urban land, 5.9% barren land, 0.6% water, and 0.3% forested wetland.

Long Cane Creek originates near the Town of Donalds, and accepts drainage from Miller Branch, Grays Creek, Pickens Creek, Bailey Creek (Bowie Branch, Morrison Branch, Job Creek), McCord Creek, Bagg Creek, and Johns Creek (Little Johns Creek, Long Branch, Dry Creek). Another McCord Creek (Keller Branch) enters Long Cane Creek next, followed by Norris Creek (Parker Creek, Adams Branch, Blue Hill Creek, Double Branch), and McGill Branch. Further downstream, Big Curltail Creek (Watts Branch, Little Curltail Creek, Grays Creek, Little Muckaway Creek, George Devlin Branch, Wharton Branch, Fell Branch) enters followed by Stillhouse Branch, Church Branch, Mountain Creek (Parsons Mountain Lake), Candy Branch, Big Branch (Richie Branch, Sawmill Creek), and Chapel Branch. Reedy Branch accepts drainage from South Fork (Hareb Branch) and Rocky Branch (Edwards Branch, Puckett Branch) before flowing into Long Cane Creek, followed by Flat Branch and Cow Branch. Long Cane Creek then begins to impound from the Little River arm of Lake Thurmond, and accepts drainage from Linkay Creek, Bold Branch (Persimmon Branch, Little Persimmon Branch, Rocky Branch, Tanyard Branch, Horton Branch, Morrah Branch, Welch Creek), and Mathias Creek. There are a total of 288.5 stream miles and 660.1 acres of lake waters in this watershed, all classified FW. The lower half of the watershed is contained within the Sumter National Forest.

Surface Water Quality

Station #	Type	Class	Description
SV-349	W/BIO	FW	LONG CANE CREEK AT S-01-159
SV-734	BIO	FW	JOHNS CREEK AT S-01-159
SV-053B	S	FW	BLUE HILL CREEK ON S MAIN ST ABBEVILLE
SV-054	BIO	FW	DOUBLE BRANCH AT S-01-33
SV-732	BIO	FW	BIG CURLY TAIL CREEK AT US FOREST RD 509
SV-318	W	FW	LONG CANE CREEK AT S-33-117, 7 MI NW MCCORMICK

Johns Creek (SV-734) - Aquatic life uses are partially supported based on macroinvertebrate community data.

Blue Hill Creek (SV-053B) - Aquatic life uses are not supported due to turbidity excursions. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter. Recreational uses are not supported due to fecal

coliform bacteria excursions. In addition, there is a significant increasing trend in fecal coliform bacteria concentrations.

Double Branch (SV-054) - Aquatic life uses are partially supported based on macroinvertebrate community data.

Big Curly Tail Creek (SV-732) - Aquatic life uses are fully supported based on macroinvertebrate community data.

Long Cane Creek – There are two monitoring stations along Long Cane Creek. Aquatic life uses are fully supported at the upstream site ***(SV-349)*** based on macroinvertebrate community, physical, and chemical data. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. At the downstream site ***(SV-318)*** aquatic life uses are fully supported. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration and a significant decreasing trend in total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are fully supported at this site and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Natural Swimming Areas

FACILITY NAME	***PERMIT #***
RECEIVING STREAM	***STATUS***
PARSONS MOUNTAIN	01-1002N
PARSONS MOUNTAIN LAKE	ACTIVE

NPDES Program

Active NPDES Facilities

RECEIVING STREAM	***NPDES#***
FACILITY NAME	***TYPE***
PERMITTED FLOW @ PIPE (MGD)	***LIMITATION***
BLUE HILL CREEK	SC0000353
MILLIKEN & CO./ABBEVILLE PLANT	MAJOR INDUSTRIAL
PIPE #: 001 FLOW: M/R	
LONG CANE CREEK	SC0040614
CITY OF ABBEVILLE/LONG CANE CK WWTP	MAJOR DOMESTIC
PIPE #: 001 FLOW: 1.7	

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME	***PERMIT #***

FACILITY TYPE	*STATUS*
CITY OF ABBEVILLE LANDFILL DOMESTIC	011002-1201; CWP-018 INACTIVE
CITY OF ABBEVILLE LANDFILL DOMESTIC	011002-1702 ACTIVE

Growth Potential

There is a moderate potential for growth in this watershed, which contains the Town of Abbeville, and portions of the Towns of Donalds, Hodges, Promised Land, Bradley, and Troy and a portion of the City of Greenwood. Industrial development in the Saluda River Basin may impact this watershed with a shared boundary. In particular, development within the Town of Hodges and the Sara Lee plant, together with the associated infrastructural and residential growth that runs along the U.S. Hwy 178 corridor to the City of Greenwood. The Abbeville County Industrial Park and the supporting rail line are sources of potential industrial growth in the watershed. The Greenwood County Industrial Site is also located within this watershed, and with support from another rail line, has potential for industrial growth. The Sumter National Forest extends across the lower half of the watershed and would limit growth in that area.